Appl. No. 09/925,159 Amdt. sent June 6, 2005 Amendment under 37 C.F.R. § 1.116 Expedited Procedure Examining Group 2127

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1 1. (Currently amended) A method comprising: 2 serially receiving, from a source, a plurality of forward messages each addressed 3 to one of a plurality of destinations, wherein each forward message is received at a destination 4 directly from the source; 5 receiving a plurality of availability signals, each availability signal indicating that 6 one of the destinations is available to accept a forward message; 7 simultaneously sending a forward message to each available destination; 8 simultaneously receiving, after a predetermined period of time, a plurality of 9 reverse messages from the destinations, each reverse message corresponding to one of the 10 forward messages simultaneously sent to an available destination; and 11 serially sending the reverse messages to the source. 1 2. (Original) The method of claim 1, wherein the source identifies each of 2 the forward messages by a different tag, further comprising: 3 placing a tag in a delay buffer when sending to a destination the forward message 4 identified by that tag, wherein the delay buffer implements a delay equal to the predetermined 5 period of time such that the tag is available when receiving from memory the reverse message 6 corresponding to the forward message; and 7 sending the tag to the source with the reverse message, whereby the source 8 associates the reverse message with the forward message. 1 3. (Original) The method of claim 1, further comprising: 2 associating a priority with each forward message; and

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3	sending a forward message to a destination when that forward message has a
4	higher priority than other forward messages addressed to that destination.
1	4. (Original) The method of claim 3, wherein the priority of each forward
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2	message represents an age of that forward message.
1	5. (Previously presented) The method of claim 1, further comprising:
2	associated a priority with each reverse message; and
3	sending a reverse message to the source when that reverse message has a higher
4	priority than other reverse messages.
1	6. (Original) The method of claim 5, wherein the priority of each reverse
2	message represents an age of that reverse message.
1	7. (Original) The method of claim 1, wherein each destination is a memory
2	bank, each forward message is a memory transaction, and each reverse message is the result of
3	one of the memory transaction.
J	one of the memory transaction.
1	8. (Currently amended) An apparatus comprising:
2	means for serially receiving, from a source, a plurality of forward messages eac
3	addressed to one of a plurality of destinations, wherein each forward message is received at a
4	destination directly from the source;
5	means for receiving a plurality of availability signals, each availability signal
6	indicating that one of the destinations is available to accept a forward message;
7	means for simultaneously sending a forward message to each available
8	destination;
9	means for simultaneously receiving, after a predetermined period of time, a
10	plurality of reverse messages from the destinations, each reverse message corresponding to one
11	of the forward messages simultaneously sent to an available destination; and
12	means for serially sending the reverse messages to the source.

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1	9. (Original) The apparatus of claim 8, wherein the source identifies each of
2	the forward messages by a different tag, further comprising:
3	means for placing a tag in a delay buffer when sending to a destination the
4	forward message identified by that tag, where the delay buffer implements a delay equal to the
5	predetermined period of time such that the tag is available when receiving from memory the
5	reverse message corresponding to the forward message; and
7	means for sending the tag to the source with the reverse message, whereby the
8	source associates the reverse message with the forward message.
1	10. (Original) The apparatus of claim 8, further comprising:
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2	means for associating a priority with each forward message; and
3	means for sending a forward message to a destination when that forward message
4	has a higher priority than other forward messages addressed to that destination.
1	11. (Original) The apparatus of claim 10, wherein the priority of each forward
2	message represents an age of that forward message.
1	12. (Previously presented) The apparatus of claim 8, further comprising:
2	means for associated a priority with each reverse message; and
3	means for sending a reverse message to the source when that reverse message has
4	a higher priority than other reverse messages.
	12 (Oniginal) The appropriate of claims 12 subgrains the anignity of each regresses
ı	13. (Original) The apparatus of claim 12, wherein the priority of each reverse
2	message represents an age of that reverse message.
l	14. (Original) The apparatus of claim 8, wherein each destination is a
2	memory bank, each forward message is a memory transaction, and each reverse message is the
3	result of one of the memory transactions.

1	15. (Currently amended) A computer program product, tangibly stored on a
2	computer-readable medium, comprising instructions operable to cause a programmable processor
3	to:
4	serially receive, from a source, a plurality of forward messages each addressed to
5	one of a plurality of destinations, wherein each forward message is received at a destination
6	directly from the source;
7	receive a plurality of availability signals, each availability signal indicating that
8	one of the destinations is available to accept a forward message;
9	simultaneously send a forward message to each available destination;
10	simultaneously receive, after a predetermined period of time, a plurality of reverse
11	messages from the destinations, each reverse message corresponding to one of the forward
12	messages simultaneously sent to an available destination; and
13	serially send the reverse messages to the source.
1	16. (Original) The computer program product of claim 15, wherein the source
1	(
2	identifies each of the forward messages by a different tag, further comprising instructions
2	identifies each of the forward messages by a different tag, further comprising instructions
2	identifies each of the forward messages by a different tag, further comprising instructions operable to cause a programmable processor to:
2 3 4	identifies each of the forward messages by a different tag, further comprising instructions operable to cause a programmable processor to:  place a tag in a delay buffer when sending to a destination the forward message
2 3 4 5	identifies each of the forward messages by a different tag, further comprising instructions operable to cause a programmable processor to:  place a tag in a delay buffer when sending to a destination the forward message identified by that tag, wherein the delay buffer implements a delay equal to the predetermined
2 3 4 5 6	identifies each of the forward messages by a different tag, further comprising instructions operable to cause a programmable processor to:  place a tag in a delay buffer when sending to a destination the forward message identified by that tag, wherein the delay buffer implements a delay equal to the predetermined period of time such that the tag is available when receiving from memory the reverse message
2 3 4 5 6 7	identifies each of the forward messages by a different tag, further comprising instructions operable to cause a programmable processor to:  place a tag in a delay buffer when sending to a destination the forward message identified by that tag, wherein the delay buffer implements a delay equal to the predetermined period of time such that the tag is available when receiving from memory the reverse message corresponding to the forward message; and
2 3 4 5 6 7 8	identifies each of the forward messages by a different tag, further comprising instructions operable to cause a programmable processor to:  place a tag in a delay buffer when sending to a destination the forward message identified by that tag, wherein the delay buffer implements a delay equal to the predetermined period of time such that the tag is available when receiving from memory the reverse message corresponding to the forward message; and send the tag to the source with the reverse message, whereby the source associates
2 3 4 5 6 7 8 9	identifies each of the forward messages by a different tag, further comprising instructions operable to cause a programmable processor to:  place a tag in a delay buffer when sending to a destination the forward message identified by that tag, wherein the delay buffer implements a delay equal to the predetermined period of time such that the tag is available when receiving from memory the reverse message corresponding to the forward message; and  send the tag to the source with the reverse message, whereby the source associates the reverse message with the forward message.

1	send a forward message to a destination when that forward message has a higher
5	priority than other forward messages addressed to that destination.
1	18. (Original) The computer program product of claim 17, wherein the
ı	18. (Original) The computer program product of claim 17, wherein the
2	priority of each forward message represents an age of that forward message.
l	19. (Previously presented) The computer program product of claim 15,
2	further comprising instructions operable to cause a programmable processor to:
3	associate a priority with each reverse message; and
4	send a reverse message to the source when that reverse message has a higher
5	priority than other reverse messages.
l	20. (Original) The computer program product of claim 19, wherein the
2	priority of each reverse message represents an age of that reverse message.
ı	21. (Original) The computer program product of claim 15, wherein each
	21. (Original) The computer program product of claim 13, wherein each
2	destination is a memory bank, each forward message is a memory transaction, and each reverse
3	message is the result of one of the memory transactions.